Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C.

In the Matter of)	
)	
The Development of Operational,)	
Technical and Spectrum Requirements)	
For Meeting Federal, State and Local)	WT Docket No. 96-86
Public Safety Agency Communication)	
Requirements Through the Year 2010)	

Reply by M/A-COM, Inc. to the Comments of the Association of Public-Safety Communications Officials - International (APCO); The City of Tulsa, Oklahoma; Pinellas County, Florida; King County, Washington; the International Association of Chiefs of Police (IACP); The Major City Chiefs; The National Sheriffs Association; The Major Counties Sheriffs Association; E.F. Johnson Company; and Daniels Electronics Ltd. in support of the Petition for Reconsideration of the Fifth Report and Order filed by Motorola, Inc.

April 11, 2003

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To the Commission:

INTRODUCTION

M/A-COM, Inc. ("M/A-COM"), pursuant to Section 1.429 of the Commission's rules,¹ and Sections 1.1200, *et seq.* of the Commission's rules,² respectfully submits this Reply to the

¹ 47 C.F.R. §1.429.

² See generally 47 C.F.R. §§1.1202, 1.1203 and 1.2306(a). The Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year Through the Year 2010, WT Docket No. 96-86, Fourth Report and Order and Fifth Notice of Proposed Rulemaking, FCC 01-10, 16 FCC Rcd 2020 (2001), adopted January 11, 2001 and released January 17, 2001 (referred to herein as "Fourth Report and Order" or "Fifth Notice" as applicable), at paragraph 101 designated the Fifth Notice as a permit-but-disclose comment rulemaking proceeding.

comments filed by the Association of Public-Safety Communications Officials – International (APCO), The City of Tulsa, Oklahoma; Pinellas County, Florida; King County, Washington – Information and Telecommunications Services Division; the International Association of Chiefs of Police (IACP); The Major City Chiefs; The National Sheriffs Association; The Major Counties Sheriffs Association; E.F. Johnson Company; and Daniels Electronics Ltd. c/o International Market Access, Inc.³ in support of the Petition for Reconsideration of the Commission's *Fifth Report and Order*⁴ in the above-captioned proceeding, filed by Motorola, Inc.⁵

As a first matter, M/A-COM notes the Commission's Rules do not provide for statements in support of the *Petition* at this point in the proceedings. Thus, the *Comments* in support of the *Petition* might be considered procedurally defective. However, the *Comments* in support of the *Petition*, although not properly marked, might also be deemed *ex parte* filings in accordance with the Commission's rules.⁶ Therefore, with an overabundance of caution, M/A-COM is replying to the *Comments* in accordance with the Commission's rules governing

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³ See Comments in Support of the Petition for Reconsideration by the Association of Public-Safety Communications Officials - International (APCO), dated April 1, 2003 and filed in WT Docket No. 96-86 on April 1, 2003; the Comments of The City of Tulsa, Oklahoma in Support of Motorola's Petition for Reconsideration, dated April 1, 2003 and filed in WT Docket No. 96-86 on April 1, 2003; the Comments of Pinellas County, Florida in Support of Motorola's Petition for Reconsideration, dated April 1, 2003 and filed in WT Docket No. 96-86 on April 1, 2003; the Comments of King County, Washington in Support of Motorola's Petition for Reconsideration, dated March 31, 2003 and filed in WT Docket No. 96-86 on April 1, 2003; the collective Comments of The International Association of Chiefs of Police (IACP), The Major City Chiefs, The National Sheriffs Association and The Major Counties Sheriffs Association dated March 30, 2003 and filed in WT Docket No. 96-86 on March 31, 2003; the E.F. Johnson Company Comments in Support of Motorola's Petition for Reconsideration – 6.25 kHz Migration Ruling in 700 MHz, dated April 28, 2003 and filed in WT Docket No. 96-86 on March 28, 2003; and the Comments of Daniels Electronics Ltd. c/o International Market Access, Inc. dated March 26, 2003 and filed in WT Docket No. 96-86 on March 26, 2003. Hereinafter these referenced comments are collectively referred to as "Comments".

⁴ The Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year Through the Year 2010, WT Docket No. 96-86, Fifth Report and Order, 17 FCC Rcd 14999 (2002), adopted July 16, 2002; released August 2, 2002 ("Fifth Report and Order").

⁵ Petition for Reconsideration, filed in WT Docket No. 96-86 by Motorola, Inc. on January 13, 2003. ("Petition")

⁶ See generally 47 C.F.R. §§1.1202, 1.1203 and 1.2306(a).

Petitions for Reconsideration in a rulemaking proceeding⁷ and/or the Commission's rules governing *ex parte* filings⁸.

BACKGROUND

M/A-COM previously filed timely Opposition⁹ to the *Petition*. The M/A-COM *Opposition* includes significant discussion outlining reasons suggesting why the Commission should and could reject the *Petition* in its entirety. The *Opposition* specifically noted M/A-COM concerns regarding the legal sufficiency of the *Petition*, concerns about the procedural efficiency of the *Petition*, and concerns regarding the accuracy of the facts asserted in the *Petition*, which such facts are alleged to justify a favorable response by the Commission in response to the *Petition*. The *Opposition* specifically noted the Commission's actions as documented by the *Fifth Report and Order* were based on a complete and substantial record, and most importantly, the *Opposition* clearly noted the Commission's actions as documented in the *Fifth Report and Order* were "in the public interest."

DISCUSSION

Close analysis of the *Comments* filed in support of the *Petition* indicates the *Comments* do not add any new grounds to the proceeding record that would justify favorable Commission reaction to the *Petition*. All of the grounds contained in the *Comments* have already been asserted in numerous earlier parts of the record.

M/A-COM also notes its *Opposition* completely addresses the merits of each and every point made in the *Comments*. Therefore, as part of this reply, M/A-COM repeats, reiterates and realleges each and every point made in its *Opposition* as though each and every point was more fully set forth in this reply. Regardless, M/A-COM will highlight several issues in this reply.

⁸ See generally 47 C.F.R. §§1.1202, 1.1203 and 1.2306(a).

⁷ 47 C.F.R. §1.429

⁹ See Opposition by M/A-COM, Inc. to the Petition for Reconsideration of the Fifth Report and Order filed by Motorola, Inc., dated April 1, 2003 and filed in WT Docket No. 96-86 on April 1, 2003. Hereinafter this M/A-OM filing is referred to as "Opposition".

The first point to be highlighted is the fact all of the *Comments*, as well as the *Petition* itself, fail to recognize the existence of the Refarming¹⁰ mandates for spectrum efficiency that take effect on January 1, 2005. The net effect of these mandates is provision of two plus years of so-called field verification for the spectrally efficient technologies before any mandated dates that have been imposed for the 700 MHz public safety band. M/A-COM will meet the *Refarming* spectrum efficiency requirements in a timely manner. Additionally, M/A-COM will apply or is applying the spectrally efficient technologies developed as a result of *Refarming* to all other public safety bands as soon as feasible. In any case, M/A-COM will provide 700 MHz equipment satisfying the *Fifth Report and Order* efficiency mandates well in advance of the dates required by the *Fifth Report and Order*.

Another point M/A-COM wants to highlight in this reply concerns the statements made in some of the *Comments*¹¹ and in the *Petition* alleging the dates adopted in the *Fifth Report and Order* will impede those 800 MHz licensees who want to expand their 800 MHz systems into the narrowband segment of the 700 MHz band. Based on an assessment of the allegations contained in the *Comments* and the *Petition*, and the technology trends in the land mobile radio market, there is no justification for allowing the minimal spectrum efficiency requirements associated with the 800 MHz band, i.e. 1 voice path per 25 kHz of occupied bandwidth, to migrate into the 700 MHz public safety band.

Regardless, M/A-COM knows the dates adopted in the *Fifth Report and Order* will not impede existing 800 MHz licensees when trying to expand into the narrowband segment of the 700 MHz public safety band. Expansion of an 800 MHz system into 700 MHz necessitates the

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Effective January 1, 2005 manufacturers must include a 6.25 kHz voice efficiency requirement in any equipment submitted for certification in the 150-174 MHz and 421-512 MHz bands. New equipment requiring certification that does not have a 6.25 kHz or equivalent mode, even old previously certified equipment that require recertification for whatever reason, can not be certified, and thus can not be marketed or sold. *See* 47 C.F.R. §90.203(j)(4) and 47 C.F.R. §90.203(j)(5). Hereinafter referred to as "*Refarming*."

¹¹ See the Comments of King County, Washington in Support of Motorola's Petition for Reconsideration, dated March 31, 2003 and filed in WT Docket No. 96-86 on April 1, 2003

addition of new 700 MHz base stations, which will of necessity meet the 700 MHz requirements. Multi-mode, multi-band subscriber units satisfying both the 800 MHz band and 700 MHz band requirements can be employed by users who need to operate in either band. Any licensee who wants to retain the right to expand their existing 800 MHz system into 700 MHz using 12.5 kHz technology¹² need only apply on or before December 31, 2006 for the appropriate general use licenses in the narrowband segment of the 700 MHz public safety band. This is not a significant imposition, particularly when one remembers use of 12.5 technology must cease within 10 years, probably much less than 10 years, from the time the particular licensee will commence utilization of the 12.5 technology in the 700 MHz band.

Additionally, there are network based solutions, available today, that could, and probably should, be included whenever an existing 800 MHz licensee desires to expand into the 700 MHz narrowband segment. These network solutions not only facilitate expansion into 700 MHz, they allow such expansion without requiring any change to existing 800 MHz subscriber equipment, regardless of whether or not such 800 MHz subscriber equipment is multiband, and regardless of the technology utilized in any single mode 800 MHz subscriber equipment.

M/A-COM is fully aware licensees in many geographic areas of the United States areas will not be able to use the 700 MHz public safety band for many years due to the presence of broadcast TV in this country and in the border countries. While the United States DTV transition date has been established¹³ it is not unrealistic to believe substantial use of the 700 MHz public safety band in many geographic areas will not occur until 2010 or later. In any case, as more and more time elapses before actual utilization of the 700 MHz public safety band

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¹² 12.5 kHz voice spectrum efficiency is used to refer to systems that only provide one voice path per 12.5 kHz of occupied bandwidth. Hereinafter referred to as 12.5 kHz technology. See also footnote 4 of the Fifth Report and Order.

¹³ The DTV transition date is established as December 31, 2006. *See* 47 U.S.C. §309(j)(14), also known as §309 of the Communications Act of 1934, as amended.

commences, the less justification there is to allow anything less than the most spectrally efficient voice operations in the band.

CONCLUSION

Regardless of whether or not the *Comments* are procedurally defective, they do not assert any legally sufficient new grounds justifying a favorable response by the Commission to the requests made in the *Petition*.

Therefore, M/A-COM again respectfully suggests the Commission reject the *Petition* in its entirety, and reaffirm the rules adopted pursuant to the *Fifth Report and Order*.

Respectfully submitted,

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